

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) An optical system,  
comprising:

a first branch aligned in a first direction and having a first end, a second end, and a first side edge extending between the first and second ends such that the first side edge is parallel to the first direction, the first branch being capable of allowing light to pass therethrough in a forward direction from the first end to the second end and a reverse direction from the second end to the first end, the first branch including a first medium with a first refractive index ( $n_1$ ) ~~and including a first end and a second end~~;

a second branch aligned in a second direction and having a first end, a second end, and a second side edge extending between the first and second ends such that the second side edge is parallel to the second direction, the second branch being capable of allowing light to pass therethrough in the a forward direction from the first end to the second end, the second branch including a second medium with a second refractive index ( $n_2$ ) ~~and including a first end and a second end~~, the second end of the second branch ~~coupled to~~ abutting the first side edge of the first branch to form an interface, wherein the second side edge of the second branch forms an angle ( $\theta_2$ ) with the first side edge of the first branch, and wherein the interface is aligned parallel to the first direction and forms ~~any light passing in the reverse direction~~

~~from the first branch to the second branch forming~~ an incident angle ( $\theta_1$ ) with the first side edge of the first branch;

wherein  $n_2 < n_1$  and  $\theta_1 \geq \sin^{-1} (n_2 / n_1)$ , whereby to prevent the light passing through the first branch in the reverse direction is prevented from passing into the second branch through the interface.

2. (original) The optical system of claim 1, wherein the first branch and the second branch are components of a Y-junction.
3. (withdrawn) The optical system of claim 1, wherein the first branch and the second branch are components of a K-junction.
4. (withdrawn) The optical system of claim 1, wherein the first branch and the second branch are components of an X-junction.
5. (original) The optical system of claim 1, wherein the first branch includes an optical absorber for absorbing the light passing in the reverse direction that is prevented from passing into the second branch.
6. (original) The optical system of claim 1, wherein isolation provided between the first branch and the second branch is polarization independent.
7. (original) The optical system of claim 1, wherein a numerical aperture of one of the ends of one of the

branches is lowered for increasing isolation.

8. (original) The optical system of claim 1, wherein a transmitting area of one of the branches is decreased for increasing isolation.
9. (canceled)
10. (original) The optical system of claim 1, wherein an optical choker is positioned at one of the ends of the second branch for increasing isolation.
11. (original) The optical system of claim 1, wherein the optical system functions as an optical isolator.
12. (original) The optical system of claim 1, wherein the optical system functions as an optical attenuator.
13. (original) The optical system of claim 1, wherein the first branch and the second branch have a substantially rectangular cross-section.
14. (withdrawn) The optical system of claim 1, wherein the first branch and the second branch are components of a first optical isolator, and further comprising a second optical isolator integrated with the first optical isolator.
15. (withdrawn) The optical system of claim 14, wherein an optical coupler is formed.
16. (withdrawn) The optical system of claim 15, wherein

- the optical coupler functions as an add-multiplexer.
17. (withdrawn) The optical system of claim 15, wherein the optical coupler functions as a polarization beam combiner.
  18. (withdrawn) The optical system of claim 15, wherein the optical coupler functions as an optical inserter.
  19. (withdrawn) The optical system of claim 14, wherein the first optical isolator and the second optical isolator are integrated with a third optical isolator to form an optical circulator.
  20. (withdrawn) The optical system of claim 15, wherein a Y-splitter added to the optical coupler forms an NxM optical coupler.
  21. (withdrawn) The optical system of claim 1, wherein a polarizer is formed.
  22. (withdrawn) The optical system of claim 11, and further comprising a wavelength selector coupled to the optical isolator to form a de-multiplexer.
  23. (withdrawn) The optical system of claim 19, and further comprising a wavelength selector coupled to the circulator to form a de-multiplexer.
  24. (withdrawn) The optical system of claim 3, wherein an extra port is available for monitoring an output as well as for feedback control of the optical system.

25. (withdrawn) The optical system of claim 4, wherein an extra port is available for monitoring an output as well as for feedback control of the optical system.
26. (withdrawn) The optical system of claim 1, wherein the system includes at least one of a waveguide, an optical fiber, a micro-optic, and a photonic crystal.
- 27-28 (canceled)
29. (currently amended) An optical method, comprising:
- passing light through a first branch aligned in a first direction and having a first end, a second end, and a first side edge extending between the first and second ends such that the first side edge is parallel to the first direction, the first branch being capable of allowing the light to pass therethrough in a forward direction from the first end to the second end and a reverse direction from the second end to the first end, the first branch including a first medium with a first refractive index ( $n_1$ ) ~~and including a first end and a second end;~~
- passing light through a second branch aligned in a second direction and having a first end, a second end, and a second side edge extending between the first and second ends such that the second side edge is parallel to the second direction, the second branch being  
capable of allowing the light to pass therethrough in the a forward direction from the first end to the second end, the second branch including a second medium with a second refractive index ( $n_2$ ) ~~and~~

~~including a first end and a second end, the second end~~  
~~of the second branch coupled to~~ abutting the first  
side edge of the first branch to form an interface,  
wherein the second side edge of the second branch  
forms an angle ( $\theta_2$ ) with the first side edge of the  
first branch, and wherein the interface is aligned  
parallel to the first direction and forms ~~any light~~  
~~passing in the reverse direction from the first branch~~  
~~to the second branch forming~~ an incident angle ( $\theta_1$ )  
with the first side edge of the first branch;

wherein  $n_2 < n_1$  and  $\theta_1 \geq \sin^{-1} (n_2 / n_1)$ , whereby ~~to~~  
~~prevent the light passing through the first branch in~~  
~~the reverse direction~~ is prevented ~~from passing into~~  
~~the second branch through the interface.~~

30. (canceled)